

SEQUENCE LISTING

<110> FAGAN, RICHARD JOSEPH
 PHELPS, CHRISTOPHER BENJAMIN
 RODRIGUES, TANIA MARIA
 POWER, CHRISTINE
 BIENKOWSKA, JADWIGA

<120> Metalloprotease Proteins

<130> C.R.107

<140> US 10/539,847

<141> 2005-06-20

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<151> 2002-12-23

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Tyr Asp

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<213> Homo sapiens

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Ala Pro Thr Cys Leu Gln Lys Gly Arg Gly Ile Val Leu His Glu Leu
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Met His Val Leu Gly Phe Trp His Glu His Thr Arg Ala Asp Arg Asp
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Arg Tyr Ile Arg Val Asn Trp Asn Glu Ile Leu Pro Gly
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Tyr Asp Tyr Ser Ser Val Met His Tyr Gly Arg
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Pro Ser Val His Ile Gly Gln Arg Trp Asn Leu Ser Ala Ser Asp Ile
 20 25 30

Thr Arg Val Leu Lys Leu Tyr Gly Cys Ser Pro Ser Gly Pro Arg Pro
 35 40 45

Arg Gly Arg Gly
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 ccaccaagcc cacagtccca tcttcagaag caggaatcca gccagtcct gtccagggaa 360
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<210> 12
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<400> 12
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      20           25           30
Pro Ser Gly Ser Ser Ala Gly Gly Gln Pro Val Pro Ala Gly Pro Gly
      35           40           45
Glu Ser Pro His Gly Trp Glu Ser Pro Ala Leu Lys Lys Leu Ser Ala
      50           55           60
Glu Ala Ser Ala Arg Gln Pro Gln Thr Leu Ala Ser Ser Pro Arg Ser
      65           70           75           80
Arg Pro Gly Ala Gly Ala Pro Gly Val Ala Gln Glu Gln Ser Trp Leu
      85           90           95
Ala Gly Val Ser Thr Lys Pro Thr Val Pro Ser Ser Glu Ala Gly Ile
      100          105          110
Gln Pro Val Pro Val Gln Gly Ser Pro Ala Leu Pro Gly Gly Cys Val
      115          120          125
Pro Arg Asn His Phe Lys Gly Met Ser Glu Asp
      130          135

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<210> 14
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<212> PRT
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<400>   14
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Tyr Asp Glu Pro Ser Arg Gln Val Ile Leu Glu Ala Leu Ala Glu Phe
          20           25           30

Glu Arg Ser Thr Cys Ile Arg Phe Val Thr Tyr Gln Asp Gln Arg Asp
          35           40           45

Phe Ile Ser Ile Ile Pro Met Tyr Gly Cys Phe Ser Ser Val Gly Arg
          50           55           60

Ser Gly Gly Met Gln Val Val Ser Leu Ala Pro Thr Cys Leu Gln Lys
65           70           75           80

Gly Arg Gly Ile Val Leu His Glu Leu Met His Val Leu Gly Phe Trp
          85           90           95

His Glu His Thr Arg Ala Asp Arg Asp Arg Tyr Ile Arg Val Asn Trp
          100          105          110

Asn Glu Ile Leu Pro Gly Phe Glu Ile Asn Phe Ile Lys Ser Gln Ser
          115          120          125

Ser Asn Met Leu Thr Pro Tyr Asp Tyr Ser Ser Val Met His Tyr Gly
          130          135          140

Arg Leu Ala Phe Ser Arg Arg Gly Leu Pro Thr Ile Thr Pro Leu Trp
145           150           155           160

Ala Pro Ser Val His Ile Gly Gln Arg Trp Asn Leu Ser Ala Ser Asp
          165           170           175

Ile Thr Arg Val Leu Lys Leu Tyr Gly Cys Ser Pro Ser Gly Pro Arg
          180          185          190

Pro Arg Gly Arg Gly Ser His Ala His Ser Thr Gly Arg Ser Pro Ala
          195          200          205

Pro Ala Ser Leu Ser Leu Gln Arg Leu Leu Glu Ala Leu Ser Ala Glu
          210          215          220

Ser Arg Ser Pro Asp Pro Ser Gly Ser Ser Ala Gly Gly Gln Pro Val
225           230           235           240

Pro Ala Gly Pro Gly Glu Ser Pro His Gly Trp Glu Ser Pro Ala Leu
          245          250          255

Lys Lys Leu Ser Ala Glu Ala Ser Ala Arg Gln Pro Gln Thr Leu Ala
          260          265          270

Ser Ser Pro Arg Ser Arg Pro Gly Ala Gly Ala Pro Gly Val Ala Gln
          275          280          285

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Glu Gln Ser Trp Leu Ala Gly Val Ser Thr Lys Pro Thr Val Pro Ser
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Ser Glu Ala Gly Ile Gln Pro Val Pro Val Gln Gly Ser Pro Ala Leu
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<210> 15
 <211> 55
 <212> DNA
 <213> Homo sapiens

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<210> 16
 <211> 19
 <212> PRT
 <213> Homo sapiens

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Leu Pro Gly

<210> 17
 <211> 126
 <212> DNA
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<210> 18
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 18
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Thr Ser Phe Pro Asp Gly Leu Thr Pro Glu Gly Thr Gln Ala Ser Gly
 20 25 30

Asp Lys Asp Ile Pro Ala Ile Asn Gln Gly
 35 40

<210> 19
 <211> 62
 <212> DNA
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 cg 62

<210> 20
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 20
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 1 5 10 15
 Ile Ile Arg Pro
 20

<210> 21
 <211> 94
 <212> DNA
 <213> Homo sapiens

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 gtggagggtcc ccttctgtgt ctccagcaag tacg 94

<210> 22
 <211> 32
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<400> 22
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 Gly Ser Gly Val Val Glu Val Pro Phe Leu Leu Ser Ser Lys Tyr Asp
 20 25 30

<210> 23
 <211> 118
 <212> DNA
 <213> Homo sapiens

<400> 23
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<210> 24
 <211> 39
 <212> PRT

<213> Homo sapiens

<400> 24

Glu Pro Ser Arg Gln Val Ile Leu Glu Ala Leu Ala Glu Phe Glu Arg
1 5 10 15

Ser Thr Cys Ile Arg Phe Val Thr Tyr Gln Asp Gln Arg Asp Phe Ile
20 25 30

Ser Ile Ile Pro Met Tyr Gly
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<210> 25

<211> 182

<212> DNA

<213> Homo sapiens

<400> 25

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tctccagaag ggccggggca ttgtccttca tgagctcatg catgtgctgg gcttctggca 120
cgagcacacg cgggccgacc gggaccgcta tatcgtgtc aactggaacg agatcctgcc 180
ag 182

<210> 26

<211> 61

<212> PRT

<213> Homo sapiens

<400> 26

Cys Phe Ser Ser Val Gly Arg Ser Gly Gly Met Gln Val Val Ser Leu
1 5 10 15

Ala Pro Thr Cys Leu Gln Lys Gly Arg Gly Ile Val Leu His Glu Leu
20 25 30

Met His Val Leu Gly Phe Trp His Glu His Thr Arg Ala Asp Arg Asp
35 40 45

Arg Tyr Ile Arg Val Asn Trp Asn Glu Ile Leu Pro Gly
50 55 60

<210> 27

<211> 82

<212> DNA

<213> Homo sapiens

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cctctgtgat gcactatggg ag 82

<210> 28

<211> 27

<212> PRT

<213> Homo sapiens

<400> 28
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 1 5 10 15

Tyr Asp Tyr Ser Ser Val Met His Tyr Gly Arg
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<210> 29
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 <212> DNA
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 <211> 52
 <212> PRT
 <213> Homo sapiens

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Pro Ser Val His Ile Gly Gln Arg Trp Asn Leu Ser Ala Ser Asp Ile
 20 25 30

Thr Arg Val Leu Lys Leu Tyr Gly Cys Ser Pro Ser Gly Pro Arg Pro
 35 40 45

Arg Gly Arg Gly
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<210> 31
 <211> 419
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<210> 32
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 32

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 20 25 30
 Pro Ser Gly Ser Ser Ala Gly Gly Gln Pro Val Pro Ala Gly Pro Gly
 35 40 45
 Glu Ser Pro His Gly Trp Glu Ser Pro Ala Leu Lys Lys Leu Ser Ala
 50 55 60
 Glu Ala Ser Ala Arg Gln Pro Gln Thr Leu Ala Ser Ser Pro Arg Ser
 65 70 75 80
 Arg Pro Gly Ala Gly Ala Pro Gly Val Ala Gln Glu Gln Ser Trp Leu
 85 90 95
 Ala Gly Val Ser Thr Lys Pro Thr Val Pro Ser Ser Glu Ala Gly Ile
 100 105 110
 Gln Pro Val Pro Val Gln Gly Ser Pro Ala Leu Pro Gly Gly Cys Val
 115 120 125
 Pro Arg Asn His Phe Lys Gly Met Ser Glu Asp
 130 135

<210> 33
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 <212> DNA
 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 34

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Met Glu Gly Val Gly Gly Leu Trp Pro Trp Val Leu Gly Leu Leu Ser
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          20          25          30

Ala Cys Gly Thr Ser Phe Pro Asp Gly Leu Thr Pro Glu Gly Thr Gln
          35          40          45

Ala Ser Gly Asp Lys Asp Ile Pro Ala Ile Asn Gln Gly Leu Ile Leu
          50          55          60

Glu Glu Thr Pro Glu Ser Ser Phe Leu Ile Glu Gly Asp Ile Ile Arg
65          70          75          80

Pro Ser Pro Phe Arg Leu Leu Ser Ala Thr Ser Asn Lys Trp Pro Met
          85          90          95

Gly Gly Ser Gly Val Val Glu Val Pro Phe Leu Leu Ser Ser Lys Tyr
          100          105          110

Asp Glu Pro Ser Arg Gln Val Ile Leu Glu Ala Leu Ala Glu Phe Glu
          115          120          125

Arg Ser Thr Cys Ile Arg Phe Val Thr Tyr Gln Asp Gln Arg Asp Phe
          130          135          140

Ile Ser Ile Ile Pro Met Tyr Gly Cys Phe Ser Ser Val Gly Arg Ser
          145          150          155          160

Gly Gly Met Gln Val Val Ser Leu Ala Pro Thr Cys Leu Gln Lys Gly
          165          170          175

Arg Gly Ile Val Leu His Glu Leu Met His Val Leu Gly Phe Trp His
          180          185          190

Glu His Thr Arg Ala Asp Arg Asp Arg Tyr Ile Arg Val Asn Trp Asn
          195          200          205

Glu Ile Leu Pro Gly Phe Glu Ile Asn Phe Ile Lys Ser Arg Ser Ser
          210          215          220

Asn Met Leu Thr Pro Tyr Asp Tyr Ser Ser Val Met His Tyr Gly Arg
          225          230          235          240

Leu Ala Phe Ser Arg Arg Gly Leu Pro Thr Ile Thr Pro Leu Trp Ala
          245          250          255

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Pro Ser Val His Ile Gly Gln Arg Trp Asn Leu Ser Ala Ser Asp Ile
 260 265 270
 Thr Arg Val Leu Lys Leu Tyr Gly Cys Ser Pro Ser Gly Pro Arg Pro
 275 280 285
 Arg Gly Arg Gly Ser His Ala His Ser Thr Gly Arg Ser Pro Ala Pro
 290 295 300
 Ala Ser Leu Ser Leu Gln Arg Leu Leu Glu Ala Leu Ser Ala Glu Ser
 305 310 315 320
 Arg Ser Pro Asp Pro Ser Gly Ser Ser Ala Gly Gly Gln Pro Val Pro
 325 330 335
 Ala Gly Pro Gly Glu Ser Pro His Gly Trp Glu Ser Pro Ala Leu Lys
 340 345 350
 Lys Leu Ser Ala Glu Ala Ser Ala Arg Gln Pro Gln Thr Leu Ala Ser
 355 360 365
 Ser Pro Arg Ser Arg Pro Gly Ala Gly Ala Pro Gly Val Ala Gln Glu
 370 375 380
 Gln Ser Trp Leu Ala Gly Val Ser Thr Lys Pro Thr Val Pro Ser Ser
 385 390 395 400
 Glu Ala Gly Ile Gln Pro Val Pro Val Gln Gly Ser Pro Ala Leu Pro
 405 410 415
 Gly Gly Cys Val Pro Arg Asn His Phe Lys Gly Met Ser Glu Asp
 420 425 430

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 <211> 1224
 <212> DNA
 <213> Homo sapiens

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 ccggcctccc tatctctgca gcggcttttg gaggcactgt cggcggaata caggagcccc 900
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catttcaagg ggatgtccga agat 1224

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<210> 36
<211> 408
<212> PRT
<213> Homo sapiens

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20 25 30
Pro Ala Ile Asn Gln Gly Leu Ile Leu Glu Glu Thr Pro Glu Ser Ser
35 40 45
Phe Leu Ile Glu Gly Asp Ile Ile Arg Pro Ser Pro Phe Arg Leu Leu
50 55 60
Ser Ala Thr Ser Asn Lys Trp Pro Met Gly Gly Ser Gly Val Val Glu
65 70 75 80
Val Pro Phe Leu Leu Ser Ser Lys Tyr Asp Glu Pro Ser Arg Gln Val
85 90 95
Ile Leu Glu Ala Leu Ala Glu Phe Glu Arg Ser Thr Cys Ile Arg Phe
100 105 110
Val Thr Tyr Gln Asp Gln Arg Asp Phe Ile Ser Ile Ile Pro Met Tyr
115 120 125
Gly Cys Phe Ser Ser Val Gly Arg Ser Gly Gly Met Gln Val Val Ser
130 135 140
Leu Ala Pro Thr Cys Leu Gln Lys Gly Arg Gly Ile Val Leu His Glu
145 150 155 160
Leu Met His Val Leu Gly Phe Trp His Glu His Thr Arg Ala Asp Arg
165 170 175
Asp Arg Tyr Ile Arg Val Asn Trp Asn Glu Ile Leu Pro Gly Phe Glu
180 185 190
Ile Asn Phe Ile Lys Ser Arg Ser Ser Asn Met Leu Thr Pro Tyr Asp
195 200 205
Tyr Ser Ser Val Met His Tyr Gly Arg Leu Ala Phe Ser Arg Arg Gly
210 215 220
Leu Pro Thr Ile Thr Pro Leu Trp Ala Pro Ser Val His Ile Gly Gln

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225 230 235 240
 Arg Trp Asn Leu Ser Ala Ser Asp Ile Thr Arg Val Leu Lys Leu Tyr
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<210> 37
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 <212> PRT
 <213> Homo sapiens

<400> 37
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 Glu Glu Thr Pro Glu Ser Ser Phe Leu Ile Glu Gly Asp Ile Ile Arg
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Asp Glu Pro Ser His Gln Val Ile Leu Glu Ala Leu Ala Glu Phe Glu
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Arg Ser Thr Cys Ile Arg Phe Val Thr Tyr Gln Asp Gln Arg Asp Phe
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Ile Ser Ile Ile Pro Met Tyr Gly Cys Phe Ser Ser Val Gly Arg Ser
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Gly Gly Met Gln Val Val Ser Leu Ala Pro Thr Cys Leu Gln Lys Gly
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Arg Gly Ile Val Leu His Glu Leu Met His Val Leu Gly Phe Trp His
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Glu His Thr Arg Ala Asp Arg Asp Arg Tyr Ile Arg Val Asn Trp Asn
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Glu Ile Leu Pro Gly Phe Glu Ile Asn Phe Ile Lys Ser Gln Ser Ser
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Asn Met Leu Thr Pro Tyr Asp Tyr Ser Ser Val Met His Tyr Gly Arg
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Leu Ala Phe Ser Arg Arg Gly Leu Pro Thr Ile Thr Pro Leu Trp Ala
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Pro Ser Val His Ile Gly Gln Arg Trp Asn Leu Ser Ala Ser Asp Ile
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Thr Arg Val Leu Lys Leu Tyr Gly Cys Ser Pro Ser Gly Pro Arg Pro
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<211> 5005

<212> DNA

<213> Artificial Sequence

<220>

<223> pCR4 TOPO IPAAA78836-1 plasmid sequence

<400> 38

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<213> Artificial Sequence

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<220>
<223> 78836-GR1-3' Primer

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<400> 43
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 <220>
 <223> GeneRacer 3' nested primer

 <400> 44
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 <210> 45
 <211> 25
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 <220>
 <223> 78836-GR1nest-3' primer

 <400> 45
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 <210> 46
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 <223> 78836-FL-F primer

 <400> 46
 ctgtcagcaa ccagcaacaa 20

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 <220>
 <223> 78836-FL-R primer

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 <210> 48
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 <223> 78836-FL2-F primer

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<210> 49
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<220>
<223> T3 primer

<400> 49
attaaccctc actaaaggga 20

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<220>
<223> T7 primer

<400> 50
taatacgact cactataggg 20

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<212> DNA
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<223> SP6 primer

<400> 51
atttaggtga cactatag 18

<210> 52
<211> 230
<212> PRT
<213> Homo Sapiens

<400> 52

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Pro Glu Ser Ser Phe Leu Ile Glu Gly Asp Ile Ile Arg Pro Ser Pro
20 25 30

Phe Arg Leu Leu Ser Ala Thr Ser Asn Lys Trp Pro Met Gly Gly Ser
35 40 45

Gly Val Val Glu Val Pro Phe Leu Leu Ser Ser Lys Tyr Asp Glu Pro

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50              55              60
Ser His Gln Val Ile Leu Glu Ala Leu Ala Glu Phe Glu Arg Ser Thr
65              70              75              80
Cys Ile Arg Phe Val Thr Tyr Gln Asp Gln Arg Asp Phe Ile Ser Ile
85              90              95
Ile Pro Met Tyr Gly Cys Phe Ser Ser Val Gly Arg Ser Gly Gly Met
100            105            110
Gln Val Val Ser Leu Ala Pro Thr Cys Leu Gln Lys Gly Arg Gly Ile
115            120            125
Val Leu His Glu Leu Met His Val Leu Gly Phe Trp His Glu His Thr
130            135            140
Arg Ala Asp Arg Asp Arg Tyr Ile Arg Val Asn Trp Asn Glu Ile Leu
145            150            155            160
Pro Gly Phe Glu Ile Asn Phe Ile Lys Ser Gln Ser Ser Asn Met Leu
165            170            175
Thr Pro Tyr Asp Tyr Ser Ser Val Met His Tyr Gly Arg Leu Ala Phe
180            185            190
Ser Arg Arg Gly Leu Pro Thr Ile Thr Pro Leu Trp Ala Pro Ser Val
195            200            205
His Ile Gly Gln Arg Trp Asn Leu Ser Ala Ser Asp Ile Thr Arg Val
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Leu Lys Leu Tyr Gly Cys
225            230

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<212> PRT
<213> Anguilla japonica

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<400> 53

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Gly Ser Ser Glu Ile Leu Met Glu Gly Asp Leu Ile Val Ser Asn Thr
20            25            30
Arg Asn Ala Met Lys Cys Trp Asn Asn Gln Cys Leu Trp Arg Lys Ser
35            40            45
Ser Asp Gly Leu Val Glu Val Pro Tyr Thr Val Ser Asn Glu Phe Ser
50            55            60

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Tyr Tyr His Lys Lys Arg Ile Glu Asn Ala Met Lys Thr Phe Asn Thr
 65 70 75 80
 Glu Thr Cys Ile Arg Phe Val Pro Arg Ser Ser Gln Arg Asp Phe Ile
 85 90 95
 Ser Ile Glu Ser Arg Asp Gly Cys Tyr Ser Tyr Leu Gly Arg Thr Gly
 100 105 110
 Gly Lys Gln Val Val Ser Leu Ala Arg Tyr Gly Cys Val Tyr His Gly
 115 120 125
 Ile Ile Gln His Glu Leu Asn His Ala Leu Gly Phe Tyr His Glu His
 130 135 140
 Thr Arg Ser Asp Arg Asp Glu Tyr Val Lys Ile Asn Trp Glu Asn Val
 145 150 155 160
 Ala Pro His Thr Ile Tyr Asn Phe Gln Thr Gln Asp Thr Asn Asn Leu
 165 170 175
 Asn Thr Pro Tyr Asp Tyr Thr Ser Ile Met His Tyr Gly Arg Thr Ala
 180 185 190
 Phe Ser Thr Asn Gly Met Asp Thr Ile Thr Pro Val Pro Asn Pro Asn
 195 200 205
 Gln Ser Ile Gly Gln Arg Arg Ser Met Ser Arg Gly Asp Ile Leu Arg
 210 215 220
 Ile Lys Lys Leu Tyr Ser Cys
 225 230

<210> 54
 <211> 86
 <212> PRT
 <213> Homo Sapiens

<400> 54

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 Gly Leu Ile Leu Glu Glu Thr Pro Glu Ser Ser Phe Leu Ile Glu Gly
 35 40 45
 Asp Ile Ile Arg Pro Ser Pro Phe Arg Leu Leu Ser Ala Thr Ser Asn
 50 55 60
 Lys Trp Pro Met Gly Gly Ser Gly Val Val Glu Val Pro Phe Leu Leu
 65 70 75 80

Ser Ser Lys Tyr Asp Glu
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<210> 55
<211> 86
<212> PRT
<213> Homo Sapiens

<400> 55

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Glu Gly Thr Gln Ala Ser Gly Asp Lys Asp Ile Pro Ala Ile Asn Gln
20 25 30

Gly Leu Ile Leu Glu Glu Thr Pro Glu Ser Ser Phe Leu Ile Glu Gly
35 40 45

Asp Ile Ile Arg Pro Ser Pro Phe Arg Leu Leu Ser Ala Thr Ser Asn
50 55 60

Lys Trp Pro Met Gly Gly Ser Gly Val Val Glu Val Pro Phe Leu Leu
65 70 75 80

Ser Ser Lys Tyr Gly Glu
85

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<211> 1103
<212> DNA
<213> Homo Sapiens

<220>
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<222> (101)..(1000)

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Met Leu Arg Leu Trp
1 5

gat ttc aat cca ggt ggg gcc ctg agt gac ctg gct ctg ggg ctc agg 163
Asp Phe Asn Pro Gly Gly Ala Leu Ser Asp Leu Ala Leu Gly Leu Arg
10 15 20

ggt atg gag gag ggg gga tat agc tgc gca gga gcc tgt ggt acc agc 211
Gly Met Glu Glu Gly Gly Tyr Ser Cys Ala Gly Ala Cys Gly Thr Ser
25 30 35

ttc cca gat ggc ctc acc cct gag gga acc cag gcc tcc ggg gac aag	259
Phe Pro Asp Gly Leu Thr Pro Glu Gly Thr Gln Ala Ser Gly Asp Lys	
40 45 50	
gac att cct gca att aac caa ggg ctc atc ctg gaa gaa acc cca gag	307
Asp Ile Pro Ala Ile Asn Gln Gly Leu Ile Leu Glu Glu Thr Pro Glu	
55 60 65	
agc agc ttc ctc atc gag ggg gac atc atc cgg ccg agt ccc ttc cga	355
Ser Ser Phe Leu Ile Glu Gly Asp Ile Ile Arg Pro Ser Pro Phe Arg	
70 75 80 85	
ctg ctg tca gca acc agc aac aaa tgg ccc atg ggt ggt agt ggt gtc	403
Leu Leu Ser Ala Thr Ser Asn Lys Trp Pro Met Gly Gly Ser Gly Val	
90 95 100	
gtg gag gtc ccc ttc ctg ctc tcc agc aag tac gat gag ccc agc cat	451
Val Glu Val Pro Phe Leu Leu Ser Ser Lys Tyr Asp Glu Pro Ser His	
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cag gtc atc ctg gag gct ctt gcg gag ttt gaa cgt tcc acg tgc atc	499
Gln Val Ile Leu Glu Ala Leu Ala Glu Phe Glu Arg Ser Thr Cys Ile	
120 125 130	
agg ttt gtc acc tat cag gac cag aga gac ttc att tcc atc atc ccc	547
Arg Phe Val Thr Tyr Gln Asp Gln Arg Asp Phe Ile Ser Ile Ile Pro	
135 140 145	
atg tat ggg tgc ttc tcg agt gtg ggg cgc agt gga ggg atg cag gtg	595
Met Tyr Gly Cys Phe Ser Ser Val Gly Arg Ser Gly Gly Met Gln Val	
150 155 160 165	
gtc tcc ctg gcg ccc acg tgt ctc cag aag ggc cgg ggc att gtc ctt	643
Val Ser Leu Ala Pro Thr Cys Leu Gln Lys Gly Arg Gly Ile Val Leu	
170 175 180	
cat gag ctc atg cat gtg ctg ggc ttc tgg cac gag cac acg cgg gcc	691
His Glu Leu Met His Val Leu Gly Phe Trp His Glu His Thr Arg Ala	
185 190 195	
gac cgg gac cgc tat atc cgt gtc aac tgg aac gag atc ctg cca ggc	739
Asp Arg Asp Arg Tyr Ile Arg Val Asn Trp Asn Glu Ile Leu Pro Gly	
200 205 210	
ttt gaa atc aac ttc atc aag tct cag agc agc aac atg ctg acg ccc	787
Phe Glu Ile Asn Phe Ile Lys Ser Gln Ser Ser Asn Met Leu Thr Pro	
215 220 225	
tat gac tac tcc tct gtg atg cac tat ggg agg ctc gcc ttc agc cgg	835
Tyr Asp Tyr Ser Ser Val Met His Tyr Gly Arg Leu Ala Phe Ser Arg	
230 235 240 245	
cgt ggg ctg ccc acc atc aca cca ctt tgg gcc ccc agt gtc cac atc	883
Arg Gly Leu Pro Thr Ile Thr Pro Leu Trp Ala Pro Ser Val His Ile	

250	255	260	
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Gly Gln Arg Trp Asn Leu Ser Ala Ser Asp Ile Thr Arg Val Leu Lys			
265	270	275	
ctc tac ggc tgc agc cca agt ggc ccc agg ccc cgt ggg aga ggt gag			979
Leu Tyr Gly Cys Ser Pro Ser Gly Pro Arg Pro Arg Gly Arg Gly Glu			
280	285	290	
tgg cat ggc agg aag gtg act tgaacctgga gaaggcgccgt gtgctcctaat			1030
Trp His Gly Arg Lys Val Thr			
295	300		
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tgc agc cca agt ggc ccc agg ccc cgt ggg aga ggg tcc cat gcc cac			97
Cys Ser Pro Ser Gly Pro Arg Pro Arg Gly Arg Gly Ser His Ala His			
20 25 30			
agc act ggt agg agc ccc gct ccg gcc tcc cta tct ctg cag cgg ctt			145
Ser Thr Gly Arg Ser Pro Ala Pro Ala Ser Leu Ser Leu Gln Arg Leu			
35 40 45			
ttg gag gca ctg tcg gcg gaa tcc agg agc ccc gac ccc agt ggt tcc			193
Leu Glu Ala Leu Ser Ala Glu Ser Arg Ser Pro Asp Pro Ser Gly Ser			
50 55 60			
agt gcg gga ggc cag ccc gtt cct gca ggg cct ggg gag agc cca cat			241
Ser Ala Gly Gly Gln Pro Val Pro Ala Gly Pro Gly Glu Ser Pro His			
65 70 75 80			
ggg tgg gag tcc cct gcc ctg aaa aag ctc agt gca gag gcc tcg gca			289
Gly Trp Glu Ser Pro Ala Leu Lys Lys Leu Ser Ala Glu Ala Ser Ala			
85 90 95			
agg cag cct cag acc cta gct tcc tcc cca aga tca agg cct gga gca			337

Arg Gln Pro Gln Thr Leu Ala Ser Ser Pro Arg Ser Arg Pro Gly Ala	
100 105 110	
ggt gcc ccc ggt gtt got cag gag cag tcc tgg ctg gcc gga gtg tcc	385
Gly Ala Pro Gly Val Ala Gln Glu Gln Ser Trp Leu Ala Gly Val Ser	
115 120 125	
acc aag ccc aca gtc cca tct tca gaa gca gga atc cag cca gtc cct	433
Thr Lys Pro Thr Val Pro Ser Ser Glu Ala Gly Ile Gln Pro Val Pro	
130 135 140	
gtc cag gga agc cca got ctg cca ggg ggc tgt gta cct aga aat cat	481
Val Gln Gly Ser Pro Ala Leu Pro Gly Gly Cys Val Pro Arg Asn His	
145 150 155 160	
ttc aag ggg atg tcc gaa gat taagcctgtg gcttctgtcc ccaagtaggg	532
Phe Lys Gly Met Ser Glu Asp	
165	
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ctcttcaactg tgttcccta agggctccta gggccagggg ttcttctagc totgccacag	712
gggaaggcag gcctggtgt gcctgtctct gacttttgcc cagccctggg ggatgctggg	772
aatgggaggt gacattctcc agggacaggt cctggaaggg gtggggaaga ggtaggttcc	832
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gggaacctca gctggccct gaacagagga ctcaattgtc tccacctac accgtattc	1192
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aa	1554

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 Trp Asn Leu Ser Ala Ser Asp Ile Thr Arg Val Leu Lys Leu Tyr Gly
 170 175 180 185

 tgc agc cca agt ggc ccc agg ccc cgt ggg aga ggg tcc cat gcc cac 630
 Cys Ser Pro Ser Gly Pro Arg Pro Arg Gly Arg Gly Ser His Ala His
 190 195 200

 agc act ggt agg agc ccc gcc ccg gcc tcc cta tct ctg cag cgg ctt 678
 Ser Thr Gly Arg Ser Pro Ala Pro Ala Ser Leu Ser Leu Gln Arg Leu
 205 210 215

 ttg gag gca ctg tcg gcg gaa tcc agg agc ccc gac ccc agt ggt tcc 726
 Leu Glu Ala Leu Ser Ala Glu Ser Arg Ser Pro Asp Pro Ser Gly Ser
 220 225 230

 agt gcg gga ggc cag ccc gtt cct gca ggg cct ggg gag agc cca cat 774
 Ser Ala Gly Gly Gln Pro Val Pro Ala Gly Pro Gly Glu Ser Pro His
 235 240 245

 ggg tgg gag tcc cct gcc ctg aaa aag ctc agt gca gag gcc tcg gca 822
 Gly Trp Glu Ser Pro Ala Leu Lys Lys Leu Ser Ala Glu Ala Ser Ala
 250 255 260 265

 agg cag cct cag acc cta gct tcc tcc cca aga tca agg cct gga gca 870
 Arg Gln Pro Gln Thr Leu Ala Ser Ser Pro Arg Ser Arg Pro Gly Ala
 270 275 280

 ggt gcc ccc ggt gtt gct cag gag cag tcc tgg ctg gcc gga gtg tcc 918
 Gly Ala Pro Gly Val Ala Gln Glu Gln Ser Trp Leu Ala Gly Val Ser
 285 290 295

 acc aag ccc aca gtc cca tct tca gaa gca gga atc cag cca gtc cct 966
 Thr Lys Pro Thr Val Pro Ser Ser Glu Ala Gly Ile Gln Pro Val Pro
 300 305 310

 gtc cag gga agc cca gct ctg cca ggg ggc tgt gta cct aga aat cat 1014
 Val Gln Gly Ser Pro Ala Leu Pro Gly Gly Cys Val Pro Arg Asn His
 315 320 325

 ttc aag ggg atg tcc gaa gat taagcctgtg gct 1048
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<210> 59
 <211> 182
 <212> PRT
 <213> Homo Sapiens

<400> 59

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 Cys Ile Arg Phe Val Thr Tyr Gln Asp Gln Arg Asp Phe Ile Ser Ile
 35 40 45
 Ile Pro Met Tyr Gly Cys Phe Ser Ser Val Gly Arg Ser Gly Gly Met
 50 55 60
 Gln Val Val Ser Leu Ala Pro Thr Cys Leu Gln Lys Gly Arg Gly Ile
 65 70 75 80
 Val Leu His Glu Leu Met His Val Leu Gly Phe Trp His Glu His Thr
 85 90 95
 Arg Ala Asp Arg Asp Arg Tyr Ile Arg Val Asn Trp Asn Glu Ile Leu
 100 105 110
 Pro Gly Phe Glu Ile Asn Phe Ile Lys Ser Gln Ser Ser Asn Met Leu
 115 120 125
 Thr Pro Tyr Asp Tyr Ser Ser Val Met His Tyr Gly Arg Leu Ala Phe
 130 135 140
 Ser Arg Arg Gly Leu Pro Thr Ile Thr Pro Leu Trp Ala Pro Ser Val
 145 150 155 160
 His Ile Gly Gln Arg Trp Asn Leu Ser Ala Ser Asp Ile Thr Arg Val
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 Leu Lys Leu Tyr Gly Cys
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<210> 60
 <211> 181
 <212> PRT
 <213> Anguilla japonica

<400> 60

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 Cys Ile Arg Phe Val Pro Arg Ser Ser Gln Arg Asp Phe Ile Ser Ile
 35 40 45
 Glu Ser Arg Asp Gly Cys Tyr Ser Tyr Leu Gly Arg Thr Gly Gly Lys
 50 55 60
 Gln Val Val Ser Leu Ala Arg Tyr Gly Cys Val Tyr His Gly Ile Ile

65		70		75		80
Gln His Glu Leu Asn His Ala Leu Gly Phe Tyr His Glu His Thr Arg						
		85		90		95
Ser Asp Arg Asp Glu Tyr Val Lys Ile Asn Trp Glu Asn Val Ala Pro						
		100		105		110
His Thr Ile Tyr Asn Phe Gln Glu Gln Asp Thr Asn Asn Leu Asn Thr						
		115		120		125
Pro Tyr Asp Tyr Thr Ser Ile Met His Tyr Gly Arg Thr Ala Phe Ser						
		130		135		140
Thr Asn Gly Met Asp Thr Ile Thr Pro Val Pro Asn Pro Asn Gln Ser						
		145		150		155
Ile Gly Gln Arg Arg Ser Met Ser Lys Gly Asp Ile Leu Arg Ile Asn						
		165		170		175
Lys Leu Tyr Ser Cys						
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 <213> Homo Sapiens

<220>
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ctc tcc ttg cca ggt gtg atc cta gga gcg ccc ctg gcc tcc agc tgc	97
Leu Ser Leu Pro Gly Val Ile Leu Gly Ala Pro Leu Ala Ser Ser Cys	
15 20 25 30	
gca gga gcc tgt ggt acc agc ttc cca gat ggc ctc acc cct gag gga	145
Ala Gly Ala Cys Gly Thr Ser Phe Pro Asp Gly Leu Thr Pro Glu Gly	
35 40 45	
acc cag gcc tcc ggg gac aag gac att cct gca att aac caa ggg ctc	193
Thr Gln Ala Ser Gly Asp Lys Asp Ile Pro Ala Ile Asn Gln Gly Leu	
50 55 60	
atc ctg gaa gaa acc cca gag agc agc ttc ctc atc gag ggg gac atc	241
Ile Leu Glu Glu Thr Pro Glu Ser Ser Phe Leu Ile Glu Gly Asp Ile	
65 70 75	

atc cgg ccg agt ccc ttc cga ctg ctg tca gca acc agc aac aaa tgg	289
Ile Arg Pro Ser Pro Phe Arg Leu Leu Ser Ala Thr Ser Asn Lys Trp	
80 85 90	
ccc atg ggt ggt agt ggt gtc gtg gag gtc ccc ttc ctg ctc tcc agc	337
Pro Met Gly Gly Ser Gly Val Val Glu Val Pro Phe Leu Leu Ser Ser	
95 100 105 110	
aag tac gat gag ccc agc cgc cag gtc atc ctg gag gct ctt gcg gag	385
Lys Tyr Asp Glu Pro Ser Arg Gln Val Ile Leu Glu Ala Leu Ala Glu	
115 120 125	
ttt gaa cgt tcc acg tgc atc agg ttt gtc acc tat cag gac cag aga	433
Phe Glu Arg Ser Thr Cys Ile Arg Phe Val Thr Tyr Gln Asp Gln Arg	
130 135 140	
gac ttc att tcc atc atc ccc atg tat ggg tgc ttc tog agt gtg ggg	481
Asp Phe Ile Ser Ile Ile Pro Met Tyr Gly Cys Phe Ser Ser Val Gly	
145 150 155	
cgc agt gga ggg atg cag gtg gtc tcc ctg gcg ccc acg tgt ctc cag	529
Arg Ser Gly Gly Met Gln Val Val Ser Leu Ala Pro Thr Cys Leu Gln	
160 165 170	
aag ggc cgg ggc att gtc ctt cat gag ctc atg cat gtg ctg ggc ttc	577
Lys Gly Arg Gly Ile Val Leu His Glu Leu Met His Val Leu Gly Phe	
175 180 185 190	
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Trp His Glu His Thr Arg Ala Asp Arg Asp Arg Tyr Ile Arg Val Asn	
195 200 205	
tgg aac gag atc ctg cca ggc ttt gaa atc aac ttc atc aag tct cgg	673
Trp Asn Glu Ile Leu Pro Gly Phe Glu Ile Asn Phe Ile Lys Ser Arg	
210 215 220	
agc agc aac atg ctg acg ccc tat gac tac tcc tct gtg atg cac tat	721
Ser Ser Asn Met Leu Thr Pro Tyr Asp Tyr Ser Ser Val Met His Tyr	
225 230 235	
ggg agg ctc gcc ttc agc cgg cgt ggg ctg ccc acc atc aca cca ctt	769
Gly Arg Leu Ala Phe Ser Arg Arg Gly Leu Pro Thr Ile Thr Pro Leu	
240 245 250	
tgg gcc ccc agt gtc cac atc ggc cag cga tgg aac ctg agt gcc tcg	817
Trp Ala Pro Ser Val His Ile Gly Gln Arg Trp Asn Leu Ser Ala Ser	
255 260 265 270	
gac atc acc cgg gtc ctc aaa ctc tac ggc tgc agc cca agt ggc ccc	865
Asp Ile Thr Arg Val Leu Lys Leu Tyr Gly Cys Ser Pro Ser Gly Pro	
275 280 285	
agg ccc cgt ggg aga ggg tcc cat gcc cac agc act ggt agg agc ccc	913
Arg Pro Arg Gly Arg Gly Ser His Ala His Ser Thr Gly Arg Ser Pro	
290 295 300	

gct ccg gcc tcc cta tct ctg cag cgg ctt ttg gag gca ctg tcg gcg 961
 Ala Pro Ala Ser Leu Ser Leu Gln Arg Leu Leu Glu Ala Leu Ser Ala
 305 310 315
 gaa tcc agg agc ccc gac ccc agt ggt tcc agt gcg gga ggc cag ccc 1009
 Glu Ser Arg Ser Pro Asp Pro Ser Gly Ser Ser Ala Gly Gly Gln Pro
 320 325 330
 gtt cct gca ggg cct ggg gag agc cca cat ggg tgg gag tcc cct gcc 1057
 Val Pro Ala Gly Pro Gly Glu Ser Pro His Gly Trp Glu Ser Pro Ala
 335 340 345 350
 ctg aaa aag ctc agt gca gag gcc tcg gca agg cag cct cag acc cta 1105
 Leu Lys Lys Leu Ser Ala Glu Ala Ser Ala Arg Gln Pro Gln Thr Leu
 355 360 365
 gct tcc tcc cca aga tca agg cct gga gca ggt gcc ccc ggt gtt gct 1153
 Ala Ser Ser Pro Arg Ser Arg Pro Gly Ala Gly Ala Pro Gly Val Ala
 370 375 380
 cag gag cag tcc tgg ctg gcc gga gtg tcc acc aag ccc aca gtc cca 1201
 Gln Glu Gln Ser Trp Leu Ala Gly Val Ser Thr Lys Pro Thr Val Pro
 385 390 395
 tct tca gaa gca gga atc cag cca gtc cct gtc cag gga agc cca gct 1249
 Ser Ser Glu Ala Gly Ile Gln Pro Val Pro Val Gln Gly Ser Pro Ala
 400 405 410
 ctg cca ggg ggc tgt gta cct aga aat cat ttc aag ggg atg tcc gaa 1297
 Leu Pro Gly Gly Cys Val Pro Arg Asn His Phe Lys Gly Met Ser Glu
 415 420 425 430
 gat taagcctgtg gct 1313
 Asp

<210> 62
 <211> 230
 <212> PRT
 <213> Homo Sapiens

<400> 62

Asp Lys Asp Ile Pro Ala Ile Asn Gln Gly Leu Ile Leu Glu Glu Thr
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 20 25 30
 Phe Arg Leu Leu Ser Ala Thr Ser Asn Lys Trp Pro Met Gly Gly Ser
 35 40 45
 Gly Val Val Glu Val Pro Phe Leu Leu Ser Ser Lys Tyr Asp Glu Pro

50 55 60
 Ser Arg Gln Val Ile Leu Glu Ala Leu Ala Glu Phe Glu Arg Ser Thr
 65 70 75 80
 Cys Ile Arg Phe Val Thr Tyr Gln Asp Gln Arg Asp Phe Ile Ser Ile
 85 90 95
 Ile Pro Met Tyr Gly Cys Phe Ser Ser Val Gly Arg Ser Gly Gly Met
 100 105 110
 Gln Val Val Ser Leu Ala Pro Thr Cys Leu Gln Lys Gly Arg Gly Ile
 115 120 125
 Val Leu His Glu Leu Met His Val Leu Gly Phe Trp His Glu His Thr
 130 135 140
 Arg Ala Asp Arg Asp Arg Tyr Ile Arg Val Asn Trp Asn Glu Ile Leu
 145 150 155 160
 Pro Gly Phe Glu Ile Asn Phe Ile Lys Ser Arg Ser Ser Asn Met Leu
 165 170 175
 Thr Pro Tyr Asp Tyr Ser Ser Val Met His Tyr Gly Arg Leu Ala Phe
 180 185 190
 Ser Arg Arg Gly Leu Pro Thr Ile Thr Pro Leu Trp Ala Pro Ser Val
 195 200 205
 His Ile Gly Gln Arg Trp Asn Leu Ser Ala Ser Asp Ile Thr Arg Val
 210 215 220
 Leu Lys Leu Tyr Gly Cys
 225 230

<210> 63
 <211> 179
 <212> PRT
 <213> Anguilla japonica

<400> 63

Asp Pro Asp Asp Leu Asp Ile Thr Ala Arg Ile Leu Gln Ser Asn Asn
 1 5 10 15
 Gly Ser Ser Glu Ile Leu Met Glu Gly Asp Met Val Val Ser Asn Thr
 20 25 30
 Arg Asn Ala Ile Asn Cys Trp Asn Asn Gln Cys Leu Trp Arg Lys Ser
 35 40 45
 Ser Asp Gly Leu Val Glu Val Pro Tyr Thr Val Ser Ser Glu Phe Ser
 50 55 60

Tyr Tyr His Lys Lys Arg Ile Glu Asn Ala Met Glu Thr Phe Asn Thr
 65 70 75 80
 Glu Thr Cys Ile Arg Phe Val Pro Arg Ser Ser Gln Arg Asp Phe Ile
 85 90 95
 Ser Ile Glu Ser Arg Asp Gly Cys Tyr Ser Tyr Leu Gly Arg Thr Gly
 100 105 110
 Gly Lys Gln Val Val Ser Leu Ala Arg Tyr Gly Cys Val Tyr Pro Tyr
 115 120 125
 Asp Tyr Thr Ser Ile Met His Tyr Gly Arg Thr Ala Phe Ser Thr Asn
 130 135 140
 Gly Met Asp Thr Ile Thr Pro Val Pro Asn Pro Asn Gln Ser Ile Gly
 145 150 155 160
 Gln Arg Arg Ser Met Ser Lys Gly Asp Ile Leu Arg Ile Asn Lys Leu
 165 170 175
 Tyr Ser Cys

<210> 64
 <211> 300
 <212> PRT
 <213> Homo Sapiens

<400> 64

Met Glu Gly Val Gly Gly Leu Trp Pro Trp Val Leu Gly Leu Leu Ser
 1 5 10 15
 Leu Pro Gly Val Ile Leu Gly Ala Pro Leu Ala Ser Ser Cys Ala Gly
 20 25 30
 Ala Cys Gly Thr Ser Phe Pro Asp Gly Leu Thr Pro Glu Gly Thr Gln
 35 40 45
 Ala Ser Gly Asp Lys Asp Ile Pro Ala Ile Asn Gln Gly Leu Ile Leu
 50 55 60
 Glu Glu Thr Pro Glu Ser Ser Phe Leu Ile Glu Gly Asp Ile Ile Arg
 65 70 75 80
 Pro Ser Pro Phe Arg Leu Leu Ser Ala Thr Ser Asn Lys Trp Pro Met
 85 90 95
 Gly Gly Ser Gly Val Val Glu Val Pro Phe Leu Leu Ser Ser Lys Tyr
 100 105 110
 Asp Glu Pro Ser Arg Gln Val Ile Leu Glu Ala Leu Ala Glu Phe Glu
 115 120 125

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Arg Ser Thr Cys Ile Arg Phe Val Thr Tyr Gln Asp Gln Arg Asp Phe
130                      135                      140

Ile Ser Ile Ile Pro Met Tyr Gly Cys Phe Ser Ser Val Gly Arg Ser
145                      150                      155                      160

Gly Gly Met Gln Val Val Ser Leu Ala Pro Thr Cys Leu Gln Lys Gly
                      165                      170                      175

Arg Gly Ile Val Leu His Glu Leu Met His Val Leu Gly Phe Trp His
                      180                      185                      190

Glu His Thr Arg Ala Asp Arg Asp Arg Tyr Ile Arg Val Asn Trp Asn
195                      200                      205

Glu Ile Leu Pro Gly Phe Glu Ile Asn Phe Ile Lys Ser Arg Ser Ser
210                      215                      220

Asn Met Leu Thr Pro Tyr Asp Tyr Ser Ser Val Met His Tyr Gly Arg
225                      230                      235                      240

Leu Ala Phe Ser Arg Arg Gly Leu Pro Thr Ile Thr Pro Leu Trp Ala
                      245                      250                      255

Pro Ser Val His Ile Gly Gln Arg Trp Asn Leu Ser Ala Ser Asp Ile
260                      265                      270

Thr Arg Val Leu Lys Leu Tyr Gly Cys Ser Pro Ser Gly Pro Arg Pro
275                      280                      285

Arg Gly Arg Gly Glu Trp His Gly Arg Lys Val Thr
290                      295                      300

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<210> 65
<211> 436
<212> PRT
<213> Homo Sapiens

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<400> 65

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Met Ser Cys Cys Leu Val Ser Pro Val Gly Ala Pro Gly Ile Cys Val
1                      5                      10                      15

Cys Pro Cys Leu Ser Gly Pro Gly Val Ile Leu Gly Ala Pro Leu Ala
20                      25                      30

Ser Ser Cys Ala Gly Ala Cys Gly Thr Ser Phe Pro Asp Gly Leu Thr
35                      40                      45

Pro Glu Gly Thr Gln Ala Ser Gly Asp Lys Asp Ile Pro Ala Ile Asn
50                      55                      60

Gln Gly Leu Ile Leu Glu Glu Thr Pro Glu Ser Ser Phe Leu Ile Glu

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65		70		75		80
Gly Asp Ile Ile Arg Pro Ser Pro Phe Arg Leu Leu Ser Ala Thr Ser						
		85		90		95
Asn Lys Trp Pro Met Gly Gly Ser Gly Val Val Glu Val Pro Phe Leu						
		100		105		110
Leu Ser Ser Lys Tyr Asp Glu Pro Ser Arg Gln Val Ile Leu Glu Ala						
		115		120		125
Leu Ala Glu Phe Glu Arg Ser Thr Cys Ile Arg Phe Val Thr Tyr Gln						
		130		135		140
Asp Gln Arg Asp Phe Ile Ser Ile Ile Pro Met Tyr Gly Cys Phe Ser						
		145		150		155
Ser Val Gly Arg Ser Gly Gly Met Gln Val Val Ser Leu Ala Pro Thr						
		165		170		175
Cys Leu Gln Lys Gly Arg Gly Ile Val Leu His Glu Leu Met His Val						
		180		185		190
Leu Gly Phe Trp His Glu His Thr Arg Ala Asp Arg Asp Arg Tyr Ile						
		195		200		205
Arg Val Asn Trp Asn Glu Ile Leu Pro Gly Phe Glu Ile Asn Phe Ile						
		210		215		220
Lys Ser Arg Ser Ser Asn Met Leu Thr Pro Tyr Asp Tyr Ser Ser Val						
		225		230		235
Met His Tyr Gly Arg Leu Ala Phe Ser Arg Arg Gly Leu Pro Thr Ile						
		245		250		255
Thr Pro Leu Trp Ala Pro Ser Val His Ile Gly Gln Arg Trp Asn Leu						
		260		265		270
Ser Ala Ser Asp Ile Thr Arg Val Leu Lys Leu Tyr Gly Cys Ser Pro						
		275		280		285
Ser Gly Pro Arg Pro Arg Gly Arg Gly Ser His Ala His Ser Thr Gly						
		290		295		300
Arg Ser Pro Ala Pro Ala Ser Leu Ser Leu Gln Arg Leu Leu Glu Ala						
		305		310		315
Leu Ser Ala Glu Ser Arg Ser Pro Asp Pro Ser Gly Ser Ser Ala Gly						
		325		330		335
Gly Gln Pro Val Pro Ala Gly Pro Gly Glu Ser Pro His Gly Trp Glu						
		340		345		350
Ser Pro Ala Leu Lys Lys Leu Ser Ala Glu Ala Ser Ala Arg Gln Pro						
		355		360		365

Gln Thr Leu Ala Ser Ser Pro Arg Ser Arg Pro Gly Ala Gly Ala Pro
 370 375 380

Gly Val Ala Gln Glu Gln Ser Trp Leu Ala Gly Val Ser Thr Lys Pro
 385 390 395 400

Thr Val Pro Ser Ser Glu Ala Gly Ile Gln Pro Val Pro Val Gln Gly
 405 410 415

Ser Pro Ala Leu Pro Gly Gly Cys Val Pro Arg Asn His Phe Lys Gly
 420 425 430

Met Ser Glu Asp
 435

<210> 66
 <211> 188
 <212> PRT
 <213> Homo Sapiens

<400> 66

Trp Pro Met Gly Gly Ser Gly Val Val Glu Val Pro Phe Leu Leu Ser
 1 5 10 15

Ser Lys Tyr Asp Glu Pro Ser His Gln Val Ile Leu Glu Ala Leu Ala
 20 25 30

Glu Phe Glu Arg Ser Thr Cys Ile Arg Phe Val Thr Tyr Gln Asp Gln
 35 40 45

Arg Asp Phe Ile Ser Ile Ile Pro Met Tyr Gly Cys Phe Ser Ser Val
 50 55 60

Gly Arg Ser Gly Gly Met Gln Val Val Ser Leu Ala Pro Thr Cys Leu
 65 70 75 80

Gln Lys Gly Arg Gly Ile Val Leu His Glu Leu Met His Val Leu Gly
 85 90 95

Phe Trp His Glu His Thr Arg Ala Asp Arg Asp Arg Tyr Ile Arg Val
 100 105 110

Asn Trp Asn Glu Ile Leu Pro Gly Phe Glu Ile Asn Phe Ile Lys Ser
 115 120 125

Gln Ser Ser Asn Met Leu Thr Pro Tyr Asp Tyr Ser Ser Val Met His
 130 135 140

Tyr Gly Arg Leu Ala Phe Ser Arg Arg Gly Leu Pro Thr Ile Thr Pro
 145 150 155 160

Leu Trp Ala Pro Ser Val His Ile Gly Gln Arg Trp Asn Leu Ser Ala

165	170	175
Ser Asp Ile Thr Arg Val Leu Lys Leu Tyr Gly Cys		
180	185	